



***Test & Measurement***





## Multimeter Selection Guide

MULTIMETER SELECTION GUIDE	310 Series			320 Series			350 Series			360		490		600	610	
	61-310	61-312	61-314	61-320	61-322	61-324	61-350	61-352	61-354	61-360	61-361	61-494	61-495	61-605	61-610	61-614
<b>MEASUREMENT FUNCTIONS</b>																
AC & DC Voltage	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AC Current	•	•	•		•	•		•	•	•	•	•	•			
DC Current		•	•	•	•	•		•	•	•	•	•	•		•	•
Resistance	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
LV Resistance												•	•			
Audible Continuity	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•
Diode Test	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
Capacitance		•	•	•	•	•		•	•		•	•	•			
Frequency		•	•	•	•	•		•	•		•	•	•			
Temperature	•	•	•									•	•			
Duty Factor												•	•			
Battery Test	•														•	•
Decibels												•	•			
Phase Rotation										•						
<b>FEATURES</b>																
Display Type (Digital or Analog)	D	D	D	D	D	D	D	D	D	D	D	D	D	D	A	A
True RMS			•		•	•			•		•	•	•			
Auto/Manual Ranging		•	•	•	•	•	•	•	•			•	•	•		
Data Hold/Auto Hold	D	D	D	D	D	D	D	D	D	D		A	A	D		
Max Hold										•						
Peak Hold				•	•	•						•	•			
Min/Max				•	•	•		•	•							
Min/Max/Avg												•	•			
Peak Min/Max				•	•	•						•	•			
Relative Mode				•	•	•						•	•			
High Speed Analog Bar Graph				•	•	•						•	•			
Auto Power Off		•	•	•	•	•	•	•	•	•	•	•	•	•		
Backlight						•						•	•			
Low Battery Indication		•	•	•	•	•	•	•	•	•	•	•	•	•		
Non-Contact Voltage							•	•	•							
Dual Display												•	•			
Overload Protection on All Ranges	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
Data Logging												•	•			
Data Acquisition						•						•	•			
Memory Storage & Recall												•	•			
Optical RS-232 Interface						•						•	•			
Optional ProVision™ Software						•						•	•			
Warranty (years)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
<b>CERTIFICATIONS</b>																
UL 61010 Listed cUL <sub>us</sub>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
CAT Rating	II	II	II	IV	IV	IV	III	III	III	III	III	III	III	II	II	II
CE	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

## PlatinumPro®

### Contractor-Grade Multimeters

#### Features

- AC/DC voltage
- Capacitance
- Frequency
- Auto/manual ranging
- Peak min/max
- Max/min
- Relative mode
- Data hold
- Low battery indicator
- Auto power off
- 2-year warranty



**61-322**

True RMS,  
AC/DC current



**61-324**

True RMS, AC/DC  
current, backlight data  
acquisition and  
RS-232 interface



Data acquisition and analysis with  
320 ProVision™ software for 324.

**61-320**



**320 Series**

320 Series Specifications		61-320	61-322	61-324
	RANGE & RESOLUTION	BASIC ACCURACY		
AC VOLTAGE	400.0m/4.000/40.00/400.0/750 V	1.3%	1.3%	1.3%
DC VOLTAGE	400.0m/4.000/40.00/400.0/1000 V	0.5%	0.5%	0.5%
AC CURRENT	400.0μ/4000μ/40.00m/400.0m A	—	1.5%	1.5%
DC CURRENT	400.0μ/4000μ/40.00m/400.0m A	1.5% (μA range only)	1.5%	1.5%
RESISTANCE	400.0/4.000k/40.00k/400.0k/4.000M/40.00M Ω	0.7%	0.7%	0.7%
CAPACITANCE	4.000n/40.00n/400.0n/4.000μ/40.00μ/ 400.0μ/4.000m/40.00m F	1.9%	2.0%	2.0%
FREQUENCY	4.000k/40.00k/400.0k/4.000M/40.00M Hz	0.01%	0.1%	0.1%

#### Accessories

Includes	
Premium Test Leads w/Alligator Clips	TL-100
Optional	
Carrying Case	C-290
Current Clamp Adapters (page E-30)	
Magnetic Strap	61-565
ProVision™ Software	61-904
RS-232 Cable	61-905



**61-904**

320 Series ProVision™  
Software



**61-905**

Optical RS-232  
Cable  
For 320 Series  
Meters



**61-565**

Magnetic hand strap fits  
Platinum Pro® and 350  
Series Multimeters

Optional magnetic strap  
frees up your hands  
to help you work safe.

# PlatinumPro®

## Industrial-Grade Multimeters

### Features



- True RMS
- Data acquisition
- Data logging
- Data storage
- Frequency
- Capacitance
- Temperature
- Low voltage Ω
- Duty factor
- dBm/dB
- Auto/manual ranging
- Dual display
- Analog bar graph
- Auto power off
- Peak hold
- Min/max/avg
- Relative mode
- 20,000 count high resolution mode
- Backlight
- Low battery indication
- 2-year warranty



**61-495**

Data logging (40,000 records), thermocouple, software and cable interface included



Data acquisition and analysis with 490 ProVision™ software.



**61-494**

Data logging (6,000 records)

### Accessories

Includes	
Carrying Case	C-290
Premium Test Leads with Alligator Clips	TL-100
Optional	
Current Clamp Adapters (page E-30)	
Magnetic Strap	61-565
ProVision™ Software*	61-900
RS-232 Cable*	61-902

\*Included with 61-495

490 Series Specifications		61-494	61-495
	RANGE & RESOLUTION	BASIC ACCURACY	
AC VOLTAGE	20.000m/200.00m/2.0000/20.000/200.00/750.0 V	0.7%	0.7%
DC VOLTAGE	20.000m/200.00m/2.0000/20.000/200.00/1000.0 V	0.06%	0.06%
AC CURRENT	20.000m/200.00m/2.0000/10.000 A	0.1%	0.1%
DC CURRENT	20.000m/200.00m/2.0000/10.000 A	0.3%	0.2%
RESISTANCE	200.00/2.0000k/20.000k/200.00k/2.0000M/20.000M/200.00M/2.0000G Ω	0.6%	0.6%
LV RESISTANCE	2.0000k/20.000k/200.00k/2.0000M/20.000M/200.00M Ω	0.3%	0.3%
CAPACITANCE	4.000n/40.00n/400.0n/4.000μ/40.00μ/400.0μ/4.000M/40.00M F	0.9%	0.9%
FREQUENCY	20.000/200.00/2.0000k/20.000k/200.00k/1.0000M Hz	0.01%	0.01%
DUTY FACTOR	20% - 80%	1.0%	1.0%
TEMPERATURE	-150° F to 2200° F (-100° C to 1200° C)	0.1%	0.1%

**61-465**

Thermocouple Adapter



**61-461**

Beaded K-type thermocouple



**61-900**

490 Series ProVision™ Software



**61-902**

Optical RS-232 Cable For 490 and 630 Series Meters





## 61-350 Series Meters

### Features



- AC/DC voltage
- Auto/manual ranging
- Non-contact voltage (80-600VAC)
- Resistance
- Audible continuity
- Diode test
- Data hold
- Low battery indicator
- Auto power off
- 2-year warranty



**61-350**



**61-352**  
AC/DC current,  
frequency,  
capacitance, max/min



**61-354**  
TRMS, AC/DC current,  
frequency, capacitance,  
max/min

350 Series Specifications	61-350		61-352		61-354	
	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY
AC VOLTAGE	200.0m/2.000/20.00/200.0/750V	1.5%	200m/2/20/200/750 VAC	1.5%	200m/2/20/200/750 VAC	1.5%
DC VOLTAGE	200.0m/2.00/20.00/200.0/1000V	0.5%	200m/2/20/200/1000 VDC	0.5%	200m/2/20/200/1000 VDC	0.5%
AC/DC CURRENT	—	1.5%	2.000A/10.00 A	1.5%	2.000A/10.00 A	1.5%
RESISTANCE	200/2k/20k/200k/2M/20M Ω	0.7%	200/2k/20k/200k/2M/20M Ω	0.7%	200/2k/20k/200k/2M/20M Ω	0.7%
CAPACITANCE	—	2.0%	2.00μ-200.0μ/2.000m F	2.0%	2n-200μ/2.000m F	2.0%
FREQUENCY	—	0.01%	2k/20k/200k/2M/20M Hz	0.01%	2k/20k/200k/2M/20M Hz	0.01%



### Accessories

Includes	
Premium Test Leads w/Alligator Clips	TL-100
Optional	
Carrying Case	C-290
600A AC/DC Clamp Adapter	61-334
Current Clamp Adapters	61-451
Magnetic Strap	61-565



**61-565**  
Magnetic hand strap fits  
Platinum Pro® and 350  
Series Multimeters

Optional magnetic strap  
frees up your hands  
to help you work safe.



Each multimeter  
has a non-contact  
voltage indicator  
feature.

## Test-Pro® Contractor-Grade Multimeters

### Features



- AC/DC voltage
- AC/DC current
- Resistance
- Audible continuity
- Manual ranging
- Rugged construction
- Auto power off
- Low battery indication
- 2-year warranty



### 61-361

True RMS,  
phase rotation,  
capacitance,  
frequency



### 61-360

Max hold,  
data hold

360 Series Specifications		61-360	61-361
	RANGE & RESOLUTION	BASIC ACCURACY	
AC VOLTAGE	200.0m/2000m/20.00/200.0/600 V	1.0%	2.0%
DC VOLTAGE	200.0m/2000m/20.00/200.0/600 V	0.5%	1.2%
AC CURRENT	2.000 A	1.5%	3.0%
DC CURRENT	2.000 A	1.0%	2.5%
RESISTANCE	200.0/2.000k/20.00k/200.0k/20.00M/200.0M Ω	1.0%	1.0%
CAPACITANCE	20.00μ/200.0μ/2.000m/20.00m F	—	4.0%
FREQUENCY	10.0-100.0k Hz	—	0.50%
PHASE ROTATION		—	80-500V (50-500Hz)



### Accessories

Includes	
Standard Test Leads	TL-58
Alligator Clip Lead	K-7515
Optional	
Carrying Case	C-290
Current Clamp Adapters (page E-30)	



### 61-565

Magnetic Strap fits 360  
Series Multimeters

## 600 Series Pocket Meter

### Features

- Low cost, multi-function
- Convenient pocket size
- Built-in test stand
- Overload protection on all ranges
- 2-year warranty



### 61-605

Audible continuity, auto power off, test lead storage



## 310 Series Digital Meters

### Features

- AC/DC voltage
- Current
- Resistance
- Audible continuity
- Temperature
- Data hold
- Diode test
- Large numbers displayed
- Overload protection on all ranges
- Rubber boot
- 2-year warranty



### 61-312

Auto ranging, AC/DC current, capacitance, frequency, auto power off, low battery indication



### 61-310

Manual ranging, tests batteries, DC current



### 61-314

Auto ranging, true RMS, AC/DC current, capacitance, frequency, auto power off, low battery indication

310 Series Specifications			61-310		61-312 & 61-314		61-605	
	RANGE & RESOLUTION	ACCURACY						
DC VOLTAGE	200.0m/2.000/20.00/200.0/600 VDC	0.8%	400.0m/4.000/40.00/400.0/600 VDC	0.8%	200.0m/2.000/20.00/200.0/600 V	2.0%		
AC VOLTAGE	200.0/600 VAC	1.2%	4.000/40.00/400.0/600 VAC	1.2%	200.0m/2.000/20.00/200.0/600V	4.0%		
CURRENT	200.0m/10 ADC	1.5%	400.0μ/4000μ/40.00m/400.0m/10A AC/DC	1.5%	—	—		
RESISTANCE	200.0/2.00k/20.00k/200.0k/20M	1.0%	400.0/4.000k/40.00k/400.0k/4.000M/40.00M Ω	1.0%	200.0/2.000k/20.00k/200.0k/2.000M/20.00MΩ	3.0%		
CAPACITANCE	—	3.0%	40.00n/400.0n/4.000μ/40.00μ/400.0μ F	3.0%	—	—		
FREQUENCY	—	3.0%	10.00/100.0/1.000k/10.00k/1.000M/10.00M Hz	3.0%	—	—		
TEMPERATURE	-4-1382°F (-20-750°C)	1.0%	-4-1382°F (-20-750°C)	1.0%	—	—		

## Analog Multimeters

### Features



- Multi-color analog display with mirrored scale
- High-impact thermoplastic case
- Battery test
- 2-year warranty

**61-614**  
Audible continuity,  
built-in stand



**61-610**  
Pocket size,  
diode protected




610 Series Specifications		61-610	61-614	
	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY
AC VOLTAGE	10/50/250/500 V	+/- 4.0% Full Scale	10/50/250/1000 V	+/- 4.0% Full Scale
DC VOLTAGE	10/50/250/500 V	+/- 3.0% Full Scale	2.5/10/50/250/1000 V	+/- 3.0% Full Scale
DC CURRENT	500µ/50m/250m A	+/- 3.0% Full Scale	5m/50m/500m/20 A	+/- 3.0% Full Scale
RESISTANCE	1 M Ω Full Scale 5 k Ω Mid Scale	+/- 3.0% Arc Length	10k/100k/10M Ω Full Scale 50/500/50k Ω Mid Scale	+/- 3.0% Arc Length
DECIBELS	-20 to +56 dB		-8 to +62 dB	
BATTERY TEST	—		1.5 , 9.0 VDC	





## Clamp Meter Selection Guide

CLAMP METER SELECTION GUIDE	61-452	700 Series			61-710	730		760 Series			770	
	61-701	61-702	61-704		61-732	61-736		61-764	61-766	61-768	61-772	61-774
<b>MEASUREMENT FUNCTIONS</b>												
AC Voltage	•	•	•	•	•	•	•	•	•	•	•	•
DC Voltage		•	•	•		•	•	•	•	•	•	•
AC Current	•	•	•	•	•	•	•	•	•	•	•	•
DC Current										•		•
Resistance	•	•	•	•	•	•	•	•	•	•	•	•
Audible Continuity	•	•	•	•		•	•	•	•	•	•	•
Diode Test		•	•	•								
Capacitance		•	•	•					•			•
Frequency		•							•			
Temperature												
Leakage Current	•											
<b>FEATURES</b>												
Display Type (Analog or Digital)	D	D	D	D	A	D	D	D	D	D	D	D
AC Current Capacity	60	200	200	200	600	400	400	660	660	660	1000	1000
DC Current Capacity										660		1000
True RMS				•		•		•	•	•	•	•
Auto/Manual Ranging						•	•	•	•	•	•	•
Data Hold	•	•	•	•		•	•	•	•	•	•	•
Max Hold		•	•	•								
Inrush Current								•	•	•	•	•
Min/Max	•							•	•	•	•	•
DCA Zero										•		•
Pointer Lock					•							
Auto Power Off	•	•	•	•		•	•	•	•	•	•	•
Non-Contact Voltage Indication		•	•	•		•	•					
Harmonics Indicator			•	•								
Vibration Mode			•	•								
Analog Output												
Backlight				•				•	•	•	•	•
Low Battery Indication	•	•	•	•		•	•	•	•	•	•	•
High Voltage Warning		•	•	•				•	•	•	•	•
Overload Protection	•	•	•	•		•	•	•	•	•	•	•
Conductor Size - Inches (mm)	1.2" (30)	1.3" (33)	1.3" (33)	1.3" (33)	1.2" (30)	1.3" (33)	1.3" (33)	1.4" (36)	1.4" (36)	1.4" (36)	2.0" (51)	2.0" (51)
Warranty (years)	2	2	2	2	2	2	2	2	2	2	2	2
<b>CERTIFICATIONS</b>												
UL 61010 Listed 		•	•	•		•	•	•	•	•	•	•
CAT Rating		III	III	III		III	III	IV	IV	IV	IV	IV
CE	•	•	•	•	•	•	•	•	•	•	•	•

## 4-in-1 Test Tools

### Features



- 200AAC current capability
- Non-contact voltage (40-600VAC)
- Capacitance
- Low battery indication
- Overload protection on all ranges
- Integral lead storage
- Audible dangerous voltage warning on all ranges
- Auto power off
- Ergonomic hourglass shape
- Compact clamp head
- 2-year warranty

#### 61-704

True RMS, backlight, vibration mode to verify AC voltage, harmonics indicator, max hold, CAT III - 1000V



#### 200 Amp Clamp/Multimeter

Use it for testing a variety of electrical parameters on branch circuits or at receptacles.



#### Non-Contact Voltage Tester

Use it for one-touch indication of power without test leads.



#### Voltage Tester with Shaker

Use it for tactile feel of AC voltage.



#### Harmonics Tester

Use it to ensure that a circuit contains clean power, free of harmonic distortion.



#### 61-701

Frequency, data hold, max hold, CAT III - 600V

#### 61-702

Vibration mode to verify AC voltage, harmonics indicator, max hold, CAT III - 1000V



### Accessories

Includes	
Carrying Case	C-700
Silicone Test Leads	TL-102

700 Series Specifications		61-701	61-702 & 61-704	
	RANGE & RESOLUTION	BASIC ACCURACY	RANGE & RESOLUTION	BASIC ACCURACY
AC VOLTAGE	200.0/600 V	1.2%	2000m/200.0/750 V	1.2%
DC VOLTAGE	20.00/200.0/600 V	0.5%	2000m/200.0/1000 V	0.5%
AC CURRENT	200.0 A	3.0%	200.0 A	3.0%
RESISTANCE	200.0/200.0k $\Omega$ Scale	1.0%	200.0/200.0k $\Omega$	1.0%
CAPACITANCE	200.0 $\mu$ F	3.0%	200.0 $\mu$ F	3.0%
FREQUENCY	2.000k/20.00k/40.00k Hz (Auto)	0.1%	—	—

Jaw opening is 1.3" (33mm).



## 400 Amp Clamp Meters

### Features



- Measures up to 400AAC
- Non-contact voltage indicator (70V-600VAC)
- Tapered jaws with hook tip
- Auto/manual ranging
- Data hold
- Auto power off
- Low battery indicator
- 2-year warranty

Tapered jaws with hook tip for easy wire separation

Convenient one-touch non-contact voltage indication

Data hold button conveniently located for thumb

Auto/manual ranging

Easy-to-read large numbers and symbols

61-732



61-736  
True RMS



### Accessories

Includes	
Carrying Case	C-90
Standard Test Leads	TL-58

730 Series Specifications		61-732	61-736
	RANGE & RESOLUTION	BASIC ACCURACY	
AC CURRENT	40.00/400.0 A	1.7%	1.7%
AC VOLTAGE	400.0/600 V	1.2%	1.2%
DC VOLTAGE	400.0/600 V	0.5%	0.5%
RESISTANCE	400.0/4.000k/ 40.00k 400.0k/4.000M/40.00M $\Omega$	1.0%	1.0%

Jaw opening is 1.25" (32mm).



Compact jaw for use in tight locations.

## 660 Amp Clamp Meters w/TightSight™ bottom display

### Features



- Measures up to 660AAC
- Voltage-presence warning on all lead functions (selectable audible)
- Bright, bold backlit display
- Tapered jaws with hook tip
- Max/min
- Inrush current
- Audible continuity
- Selectable auto power off
- Data hold
- Low battery indicator
- 2-year warranty



61-764



61-766



**True RMS,  
Capacitance,  
Frequency  
measurement via  
clamp head or leads,  
66AAC low range**

61-768



**660 ADC current  
measurements,  
True RMS**

760 Series	61-764	Range & Resolution 61-766	61-768	Accuracy
AC Current		66.00/660.0 A	660.0 A	1.7%
DC Current	—	—	660.0 A	1.5%
AC Voltage		660m/6.600/66.00/660.0/750 V		1.2%
DC Voltage		660m/6.600/66.00/660.0/1000 V		0.5%
Resistance		660.0/6.600k/66.00k/660.0k/6.6M/10M Ω		1.0%
Capacitance	—	6.600μ/66.00μ/660.0μ F	—	3.0%
Frequency	—	20 - 400 Hz Sensitivity: ≥5A for 20-100 Hz ≥10A for 100-400 Hz	—	0.1%

Jaw Size 1.42" (36 mm)



### Safety First!

The complete line of industrial clamps from IDEAL was designed to set a new standard for safety technology. It starts with the revolutionary TightSight™ display. It allows an electrician to keep his head and face out of potentially dangerous panels while viewing the measurement. The high voltage indicator is another feature not to be taken for granted. It indicates the presence of voltage through the test leads even with the dial set to the wrong function. The CAT III and IV ratings, rugged construction and UL listing should give every electrician the confidence to go about the job without worrying about equipment safety.

### Accessories

Includes	
Carrying Case	<b>C-760</b>
Test Leads w/Alligator Clip	<b>TL-104</b>



## 1000 Amp Clamp Meters w/TightSight™ bottom display

### Features

- Measures up to 1000A
- Voltage-presence warning on all lead functions (selectable audible)
- Bright bold backlit display
- Tapered jaws with hook tip
- True RMS
- Max/min
- Inrush current
- Audible continuity
- Selectable auto power off
- Data hold
- Low battery indicator
- 2-year warranty



61-774

AC/DC current,  
capacitance

Exclusive TightSight™  
Display

770 Series	Range & Resolution		Accuracy
	61-772	61-774	
AC Current	66.00/660.0/1000 A		1.7%
DC Current	—	660.0/1000 A	1.5%
AC Voltage	660m/6.600/66.00/660.0/750 V		1.2%
DC Voltage	660m/6.600/66.00/660.0/1000 V		0.5%
Resistance	660.0/6.600k/66.00k/660.0k/ 6.6M/10M $\Omega$		1.0%
Capacitance	—	6.600 $\mu$ /66.00 $\mu$ / 660.0 $\mu$ F	3.0%

Jaw Size 2" (51 mm)



### Accessories

Includes	
Carrying Case	C-770
Test Leads w/Alligator Clip Lead	TL-104



61-772

## Analog Clamp Meter

### Features

- Analog display
  - Pointer lock
  - 2-year warranty
- Includes carrying case

710 Series Specifications 61-710		
	RANGE & RESOLUTION	ACCURACY
AC VOLTAGE	150/300/600 V	3.0% F.S.
DC VOLTAGE	—	—
AC CURRENT	6/20/60/200/600 A	3.0% F.S.
RESISTANCE	2k $\Omega$	3.0% F.S.
TEMPERATURE	—	—

CE  N12966



### 61-710

600AAC current, Ohms scale on dial drum, broad frequency response (50 to 400 Hz)

## Leakage Current Clamp Meter

### Features



- 40mA to 60AAC current capability
  - Data hold
  - Analog bar graph
  - Min/max
  - 2-year warranty
- Includes carrying case

Current Clamp Specifications 61-452		
	RANGE & RESOLUTION	ACCURACY
AC VOLTAGE	400.0 V	1.5%
AC CURRENT	40.00/400.0m/4.000/40.00/60.0 A	2.0%
RESISTANCE	400.0 $\Omega$	1.0%

CE  N12966



### 61-452

## Combo Cases™

### Features

- Top selling tools in rugged cases
- Unmatched value
- Large storage compartments
- 2-year warranty

### 61-2000

**Tester Combo Case™ Includes:**  
#61-086 Vol-Con® XL Voltage Tester  
#61-534 Circuit Breaker Finder  
#61-063 Non-Contact Voltage Tester



### 61-2001

**Meter Combo Case™ Includes:**  
#61-350 Multimeter  
#61-732 400 Amp Clamp



### 61-2002

**Clamp Combo Case™ Includes:**  
#61-766 TightSight™ Clamp Meter  
#61-521 Phase Rotation Tester





## SureTest® Open/Closed Circuit Tracers

### Features



- Identifies breakers and fuses
- Pinpoints opens and shorts
- Traces wires
- "0-99" display of signal strength
- Audible intensifies in tone/pitch
- Can be used on circuits 0-600V AC/DC
- Works on energized or de-energized circuits
- Four modes of sensitivity – search high, search low, trace and breaker
- Peak bar graph
- 2-year warranty

Circuit Tracers



### 61-954

Standard LED receiver, transmitter, test lead set



### 61-958

Super bright rotating OLED display receiver, transmitter, test lead set, inductive clamp, battery pack



### 61-956

Super bright rotating OLED display, transmitter, test lead set



### Exclusive Rotating Display

Revolutionary technology in the SureTest® 958 rotates the display in 90° increments so that you always receive an upright reading. Even when the receiver is pointing down, you can keep up.



Transmitter will work on a de-energized circuit and won't affect GFCIs and sensitive equipment on an energized circuit.

AA batteries provide the transmitter and receiver 4x the power.





## SureTest® Circuit Tracers



**In Breaker Mode**  
receiver identifies the correct circuit to which the transmitter is connected.



**Inductive Clamp**  
allows you to induce a tracer signal on the cable without affecting the low voltage signals on the circuit.



**Sorting Wires**  
Individual wires can be sorted, opens can be located and shorts can be isolated.



**IC-958, BP-958**  
**Inductive Clamp w/ Battery Pack**



**RC-954**  
**Receiver**  
**Red LED display**



**RC-958**  
**Receiver**  
**Bright OLED rotating display**



**TR-958**  
**Transmitter**

## Kit Components

Kit Contents	61-954	61-956	61-958
Transmitter	TR-958	TR-958	TR-958
Receiver	RC-954	RC-958	RC-958
Tracer Test Lead Set	TL-956	TL-956	TL-956
Inductive Clamp			IC-958
Battery Pack			BP-958
Hard Carrying Case	C-954	C-954	C-958
Batteries	■	■	■
Instruction Manual	■	■	■

## Accessories

Includes	
Fuse – High-energy, Fast-acting, 1A/1000V	<b>F-956</b>
Magnetic Strap	<b>61-565</b>
Tracer Test Lead Set (includes 1-6 below)	<b>TL-956</b>
1. Outlet Plug Adapter for Transmitter	<b>TLOP-956</b>
2. Blade Prongs for Lead Adapters (2/set)	<b>TLBP-956</b>
3. Ground Prong for Lead Adapter	<b>TLGP-956</b>
4. Alligator Clips for Lead Adapters (2/set)	<b>TLAC-956</b>
5. 3 ft. Lead Adapters for Transmitter (2/set)	<b>TLA1-956</b>
6. 25 ft. Lead Adapter for Transmitter	<b>TLA2-956</b>

## SureTest® Circuit Tracer Specifications

Transmitter:	
Operating Voltage	0 - 600V AC/DC
Battery Power	1.5V x (4) AA batteries (NEDA 15A, IEC LR6)
Battery Life	25 hours open circuit testing/6 hours short circuit tracing
Indicators	On/Off, Line energized, low battery
Receiver:	
Sensing	Magnetic
Battery Power	1.5V x (3) AA batteries (NEDA 15A, IEC LR6)
Battery Life	20 hours

**TL-956**  
**Test Lead Kit**



## Features

- Ground resistance measurements
- Auto ranging
- Auto power off
- 2-year warranty



### 61-788

**MEGGER® 3-Pole Meter**  
2- & 3-point fall of potential methods, easy single push-button operation, includes terminal shorting bars, rugged weatherproof construction, optional lead set (61-798) not included



### 61-920

#### Ground Resistance Clamp Meter

Large clamp size, backlight, saves up to 99 measurements



### 61-789

**MEGGER® 4-Pole Meter**  
3- & 4- fall of potential methods, soil resistivity, easy single push-button operation, includes terminal shorting bars, rugged weatherproof construction, optional lead set (61-798) not included.



### 61-798

#### MEGGER® Earth Resistance Lead Set Kit

Kit includes four silicone test leads with alligator clips (3, 15, 30, 50m), 20 in. auxiliary grounding rods (2 pr.) and padded nylon carrying case

Specifications	61-920		61-788		61-789	
	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY
GROUND RESISTANCE	0/120/1200Ω	1.5%	200.0/2.00kΩ	2.0%	400.0/600/1500 Ω	2.0%
GROUND LEAKAGE CURRENT	100m/1000m/15/30 A	2.0%	—	—	—	—
SOIL RESISTIVITY	—	—	—	—	20.00/200.0/2.000k/20.00kΩ	2.0%

MEGGER® is a registered trademark of Megger, Inc.  
\*Clamp accommodates conductor size up to 1.25 in. (32mm).

## Features



- Checks new installations for proper insulation
- Checks existing installations and motor windings for breakdowns in insulation
- 2-year warranty



### 61-791

#### MEGGER® Hand-held Insulation Tester

Test voltage: 250/500/1000V, test inhibition >25V, default voltmeter to 600V AC/DC, digital display with analog arc, auto discharge, auto power off, auto ranging, protective rubber boot, continuity, low battery indication, Cat III – 300V, includes carrying case



### 61-792

#### MEGGER® 5kV Insulation Tester

500V/1000V/2500V/5000V test voltages, battery or hand-crank operation, auto discharge, AC/DC voltage to 600V, battery test, Cat III – 300V, includes carrying case

Insulation Tester Specifications				
	61-791		61-792	
	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY
TEST VOLTAGE	250/500/1000 V		500/1000/2500/5000 V	
INSULATION RESISTANCE	999M $\Omega$	3.0%	100k - 20G $\Omega$	5.0%
CONTINUITY	0.01-100 $\Omega$	3.0%		

MEGGER® is a registered trademark of Megger, Inc.





The IDEAL Power Quality Analyzer is a versatile and easy-to-use tool that will give you the information you need to get the job done. The unit measures and analyzes power quality on both single- and three-phase electrical systems. Instantaneous readouts of current, voltage, power and harmonics including tables, bar graphs and even individual waveforms, make job site data interpretation easy. With a real-time clock and 1MB of memory, the Power Analyzer stores data that can be downloaded to a personal computer for in-depth analysis using PowerVision™ software.

It's everything a professional needs for monitoring and analysis in a single unit: rugged, versatile and easy to use. Models available with 3 or 4 current channels to meet your needs and budget.

## 3-Phase Power Analyzer

### Features

- True RMS
- Single- or three-phase measurements
- Data logging (1MB memory)
- Up to one month of recording time
- 4-channels for voltage measurements
- 4-channels for current measurements\*
- Auto ranging
- Min/max/avg
- Energy and Harmonics Program
- PowerVision™ Software
- Lightweight, portable design
- Easy-to-use push-button operation
- Backlit display
- Customized data collection
- 2-year warranty
- Optional FIFO memory
- Real-time clock
- Programmable trigger-points and start/stop time
- Intelligent battery charging system
- Easy set-up
- Interactive demo CD

### Power & Energy Measurements

- Kilowatts (KW)
- Volt-amperes (VA)
- Inductive reactive power (kvarL)
- Capacitive reactive power (kvarC)
- Power factor (PF)
- Frequency
- Kilowatt hours (kWh)
- Reactive power per hour (kvarhL, kvarhC)

### Harmonics Measurements

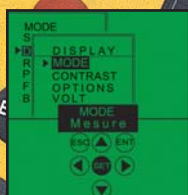
- Total harmonic distortion (% THD)
- Harmonic factorization (FFT) to 51st harmonic

*\*Model 805 equipped with three channels for current*

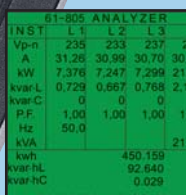


Power Analyzer Specifications 61-805, 61-806, 61-807		
	RANGE & RESOLUTION	ACCURACY
AC VOLTAGE	20 to 600 V (phase-neutral)	0.5%
	20 to 866 V (phase-phase)	0.5%
AC CURRENT	10 to 1000 A (with supplied clamp adapters)	1.0%
ACTIVE POWER	866 kW (with supplied clamp adapters)	1.0%
REACTIVE POWER	866 kW (with supplied clamp adapters)	1.0%
POWER FACTOR	0.5 to 1.0	1.0%

## Power Analyzer Display Screens



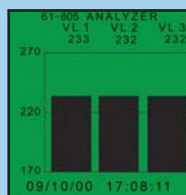
Program Setup



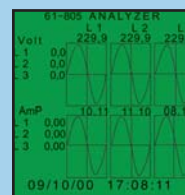
Table



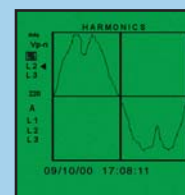
Exploded View



Bar Graph



Scope View



Waveform Zoom



## Standard Equipment



## Accessory Clamps

Accessories	
1000AAC clamps (set of 3)	61-811
100AAC neutral clamp (1)	61-813
5AAC compact neutral clamp (blue)	61-814
2000AAC clamps (set of 3)	61-810
500AAC clamps (set of 3)	61-812
5AAC compact clamps (set of 3)	61-819
100AAC compact clamps (set of 3)	61-820
100AAC compact neutral clamp (blue)	61-821
200/2000/20000AAC Flexible clamp adapters (set of 3)	61-457



200/2000/20000AAC Flexible Clamp Adapters

Standard Equipment	61-805	61-806	61-807
1000AAC Clamps (61-811)	•	•	•
100AAC Neutral Clamps (61-813)			•
Voltage leads with Alligator Clips (TL-806)	•	•	•
Power supply with RS-232 Interface and cables	•	•	•
PowerVision™ Analysis Software	•	•	•
Demonstration CD and Instructions	•	•	•
Protective Carrying Case	•	•	•



5AAC Compact Current Clamp



100AAC Compact Current Clamp



100AAC Current Clamp



500AAC Current Clamp

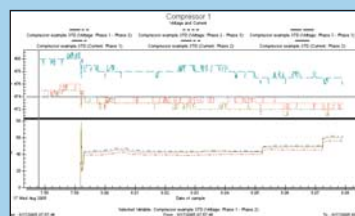


2000AAC Current Clamp

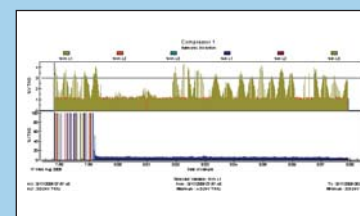
## PowerVision™ Software

PowerVision™ software provides intuitive analysis of data and automatic generation of useful tables and graphs. Files are easily downloaded from any 800 series unit.

PowerVision™ provides multiple ways to view basic and detailed information, allowing you to customize readouts according to your trouble shooting needs. Compare up to 12 variables simultaneously. Easily scroll through, expand and collapse data over time. Compare data from multiple files to show before and after studies. Data can be exported to text files, databases, graphs and tables can be pasted into Excel or Word reports. Highly-trained technical support people are always a phone call away.



Current and Voltage



Harmonic Distortion

## Voltage Performance Monitor (VPM)

### Applications

#### Monitor voltage near sensitive equipment

- Installation and Service Technicians
  - Monitor voltage at point of equipment connection
- Electricians
  - Eliminate guesswork on service calls
- Building Maintenance Technicians
  - Identify voltage caused equipment failures
- Equipment Manufacturers
  - Eliminate unnecessary warranty costs
- Hospital/IT Maintenance Engineers
  - Monitor voltage quality to critical equipment

### Features



- Real-time TRMS voltage, frequency and harmonics monitoring
- Logs voltage, sags, swells and impulses
- Measures %THD and logs periods over 3% (line to neutral)
- Selectable thresholds based on the most accepted international standards, defaults to ITIC\*
- Custom programmable event thresholds
- Invertible display, when it is necessary to plug in upside down
- 2-year warranty

\*Captures events that would affect equipment on branch circuit



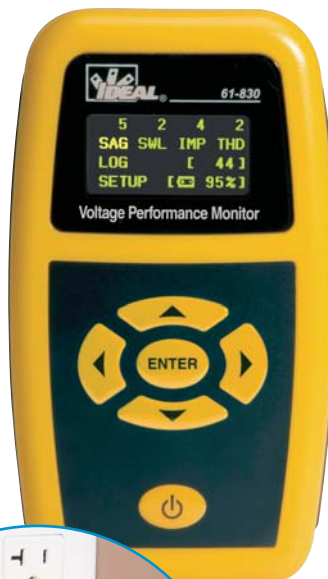
### Accessories

Includes	
Replacement Adapters (set of four)	PA-830
Replacement Carrying Case	61-179
Optional	
Alligator Clip Adapters (2-wire)	TL-532
1 ft. US Extension Cord	61-177
Kit w/(1) SureTest® 164,	
(2) VPM 61-830, Soft Case	61-2003
Kit w/(1) SureTest® 164,	
(4) VPM 61-830, Soft Case	61-2004

Specifications	61-830
Operating Range	15-265V
Memory	512 events
Sampling Method	Continuous (128 samples per cycle)
Voltage Accuracy	1%
Impulse Detection	6µs, 4kV
THD	FFT calculation

### See voltage through the eyes of your equipment

Poor voltage quality increases facility expenses, warranty costs and downtime plus shortens the life of equipment. The IDEAL VPM identifies voltage conditions that can damage equipment or cause equipment failure.



61-830

#### Voltage Performance Monitor Display Screens

5 2 4 3  
SAG SWL IMP THD  
129V 60.0Hz 2.3%  
08:39 06-22-2006

**Monitor Screen:** Real-time information on voltage, voltage events and harmonics.

06-01 05:15 RUN  
06-01 05:14 THD  
06-01 05:14 SWL1  
06-01 05:12 MIN1

**Log Screen:** Review events by category or chronological order.

70V 2 Cycles  
68V 2.5 Cycles  
05:14:03  
06-01-06

**Event Detail:** Provides a time stamp with event magnitude and duration.

1.0 kV  
72 µS  
08:43:40  
08-24-06

**Impulse Detail:** Fast response catches positive and negative impulses up to 4kV.

Set Nominal  
120V  
Set Standard  
ITIC

**Set Standard:** Select from more than a dozen threshold options based on existing standards or customize your own (defaults to ITIC).

## SureTest® Circuit Analyzers

### Features



- Super-bright display
- High accuracies
- Measures voltage drop under full load\*
- True RMS
- Line voltage
- Peak voltage
- Frequency
- Ground to neutral voltage
- Ground impedance
- Hot and neutral conductor impedances
- Identifies proper wiring in 3-wire receptacles
- Identifies false (bootleg) grounds
- Tests GFCIs and EPDs for proper operation
- Conducts testing without disturbing sensitive loads
- Verifies isolated grounds (with 61-176 adapter)
- 2-year warranty

\*12A, 15A, 20A load tests

**61-165**

Tests AFCIs for proper operation, tests for shared neutrals



**61-164**



**61-183**



**61-182**

1-ft. Extension Cord



**61-175 and 61-176**

Ground Continuity and Isolated Ground Adapters, respectively



### Accessories

Includes	
Carrying Case	61-179
1' Extension Cord	61-182
Optional	
Ground Continuity Adapter	61-175
Isolated Ground Adapter	61-176
Alligator Clip Adapter	61-183



### SureTest® 160 Series Specifications

	RANGE & RESOLUTION	BASIC ACCURACY
AC VOLTAGE	85.0 - 265.0 VAC	1.0%
FREQUENCY	45.0 - 65.0 Hz	1.0%
IMPEDANCE	0.00 - 1.99 Ω	5.0%
GROUND-NEUTRAL VOLTAGE	0.0 - 24.0 VAC	2.0%
% VOLTAGE DROP 12A, 15A, 20A load tests	0.1% - 50.0%	5.0%
GFCI TEST CURRENT Times out after 6.5 seconds	6.0 - 9.0 mA 0.0 - 6500 mS	2.0%





## Circuit Identifiers

### Features

- Fully automatic operation
- Positively identifies circuit breakers and fuses without service interruption
- Self calibrating
- Visual and audible indicators
- 2-year warranty



### 61-534

#### Circuit Identifier with Digital Receiver

Microprocessor controlled sensitivity level, verifies proper wiring, checks GFCI operation, non-contact voltage, works on 120 and 240V circuits



### 61-532

#### Circuit Identifier with Analog Receiver

### Circuit Identifier Specifications

	61-532	61-534
OPERATING VOLTAGE	100 - 140 VAC	100 - 250 VAC
OPERATING FREQUENCY	47 - 63 Hz	47 - 63 Hz



### Accessories

Optional	
Carrying Case	C-290
Alligator Clip Adapter	TL-532



### TL-532

#### Alligator Plug Adapter





## SureTest® Arc Circuit Tester

### Features

- Tests AFCIs for proper operation
- Tests GFCIs for proper operation
- Tests for shared neutrals
- Verifies wiring configuration
- Compact size fits comfortably in pocket
- 1-year warranty



**61-058**

**SureTest® Arc Circuit Tester**  
Tests AFCI/GFCI devices for proper operation



**61-177**

1-ft. Extension Cord



**61-184**

Alligator Clip Adapter



### Accessories

Optional	
1' Cord Adapter	61-177
Alligator Clip Adapter	61-184
Carrying Case with Belt Clip	C-50



**C-50**

Carrying Case

## E-Z Check® Circuit Testers

### Features

- Tests for correct wiring, open ground, reverse polarity, open hot, open neutral, hot on neutral, hot and ground reversed with open hot, and ground fault interruption in 3-wire, 125VAC circuits
- No-slip ergonomic design maximizes comfort
- Premium neon lamps prevent false readings
- Tough, impact-resistant case
- Tests GFCI receptacles for proper operation
- 2-year warranty



**61-051**

**E-Z Check® Plus GFCI Circuit Tester**  
Tests GFCI receptacles for proper operation



**61-035**

**E-Z Check® Circuit Tester**



## Receptacle Testers

### Features

- Warns against faulty wiring in 3-wire receptacles
- For use on 125VAC circuits
- 1-year warranty



**61-501**

**GFCI Receptacle Tester**  
Tests GFCI receptacles for proper operation



**61-500**

**Receptacle Tester**

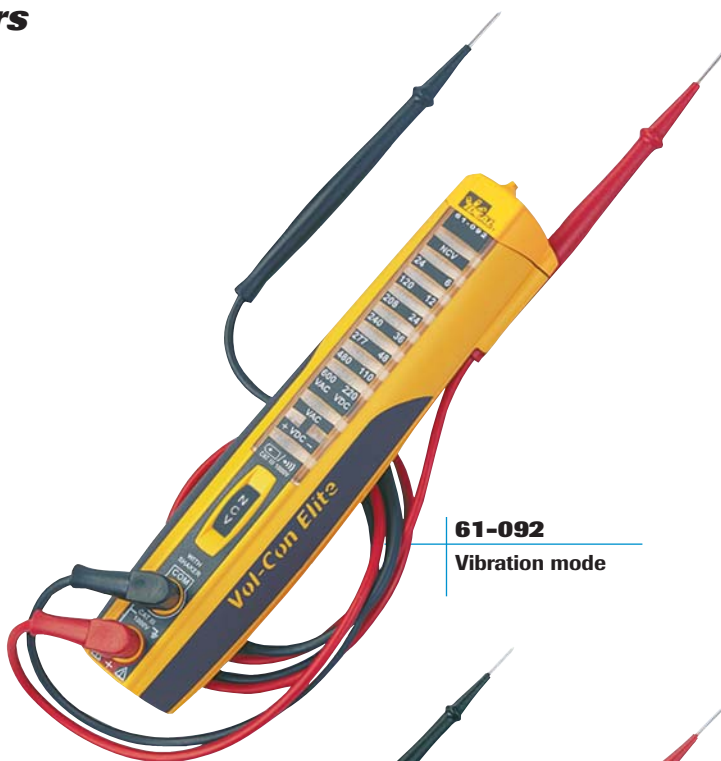


## Vol-Con® Elite Voltage Testers

### Features



- Digital circuitry for better resolution
- Tests for AC Voltage from 24-600VAC
- Tests for DC Voltage from 6-220VDC
- Audible continuity
- Non-contact voltage indication
- Low impedance to eliminate ghost voltages
- Low battery indicator
- Replaceable silicone test leads
- Integral lead storage
- 2-year warranty



**61-092**

Vibration mode

### Accessories

Includes	
Silicone Test Leads	TL-102
Optional	
Carrying Case	C-90



*Vibration mode gives a tactile indication of the voltage level.*



*Non-contact voltage sensor easily locates breaks in power cords.*



**61-090**

## Solenoid Voltage Testers

### Features

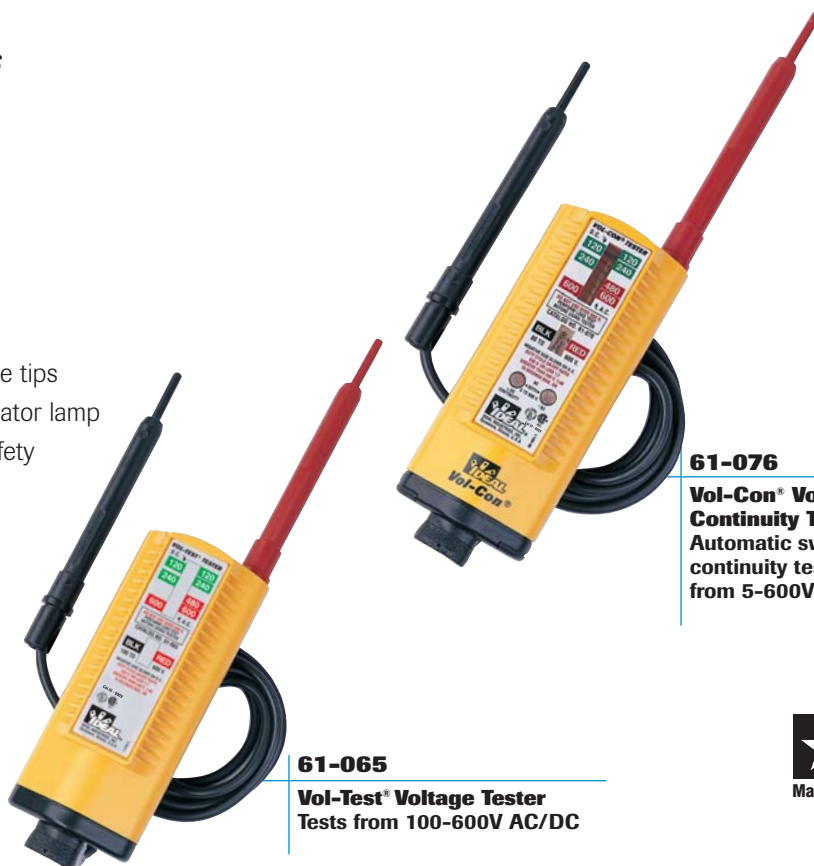


- Extremely rugged and reliable
- Vibrates when voltage is present
- Tests for AC Voltage
- Tests for DC Voltage
- Replaceable leads with shielded probe tips
- Bright, long-life LED's and neon indicator lamp
- Dual voltage indication for backup safety
- 2-year warranty

### Accessories

Includes	
Standard Test Leads	61-070
Optional	
Resistor-fused Leads*	61-072
Padded Nylon Case	C-90
Leather Case	61-010

\*Special, current-limiting resistor in each lead acts as a fuse to open in a short-circuit situation.



**61-065**

**Vol-Test® Voltage Tester**  
Tests from 100-600V AC/DC

**61-076**

**Vol-Con® Voltage/Continuity Tester**  
Automatic switching continuity tester, tests from 5-600V AC/DC



Solenoid Voltage Testers

## XL-Series Solenoid Voltage Testers

### Features



- Extremely rugged and reliable tester
- Vibrates when voltage is present
- Tests AC/DC Voltage
- Replaceable leads with shielded probe tips
- Bright, long-life LED's and neon indicator
- Dual voltage indication for backup safety
- Compact size
- 2-year warranty

### Accessories

Includes	
Standard Test Leads	TL-80
Optional	
Resistor-fused Leads*	TL-82
Padded Nylon Case	C-90
Leather Case	61-010

\*Special, current-limiting resistor in each lead acts as a fuse to open in a short-circuit situation.



**61-086**

**Vol-Con® XL Voltage/Continuity Tester**  
Audible continuity, audible voltage indication, tests from 6-600V AC/DC

**61-085**

**Vol-Test® XL Voltage Tester**  
Tests from 80-600V AC/DC



## Split-Jaw™ Smart Meter

### Features



- Measures 0.1-200AAC\*
- Measures 1.3-750VAC
- Measures 0.1-1000VDC
- Measures 0.1-2000Ω
- Audible continuity
- Data hold
- Integral lead storage
- Replaceable test leads
- Auto power off
- Low battery indication
- 2-year warranty

Electrical Tester

61-096  
Split-Jaw™



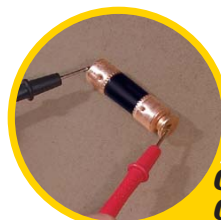
**EASY  
NO DIAL  
TO USE**



AC/DC Volts



AC Amps



Ohms/  
Continuity

AUTOMATICALLY SENSES & DISPLAYS

### Accessories

#### Optional

Carrying Case

C-90

Specifications	61-096	
AC VOLTAGE	1.3 - 750 V	1.5%
DC VOLTAGE	1.8 - 1000 V -0.6 - 1000 V	1.0%
AC CURRENT	0.6 - 200.0 A	3.0%
RESISTANCE	0 - 2000 Ω	1.0%

\*Note: Jaw opening is 0.6 in. (16mm) - up to 1/0 copper cable





## VoltAware™ Non-Contact Voltage Tester

### Features



- Indicates presence of voltage from 50-1000VAC
- Visual indication of voltage
- Selectable audible indication of voltage
- Sleek, compact design
- Green LED indicates power on
- Low battery indicator
- Battery replacement (AAA size)
- 2-year warranty



**61-025**

**VoltAware™ NCV Tester**  
Overmolded cushion grip



## Non-Contact Voltage Tester

### Features



- Tests for voltage from 40V to 600VAC
- Audible and visual indication
- Locates breaks along live insulated wires
- Tests for energized circuits
- 1-year warranty



**61-063**

**Volt-Sensor® NCV Tester**  
Overmolded cushion grip



## Continuity Tester

### Features

- Checks continuity of dead circuits and ground on conduit systems and identifies wires in multi-wire cables
- Light signal indicates completed circuit
- Bulb-in end can serve as flashlight
- Pocket clip functions as probe
- Removable 4-ft. test lead with alligator clip
- 1-year warranty



**61-030**

**Continuity Tester**

## Circuit Tester

### Features

- Industrial-quality tester checks voltage from 80V to 600V AC/DC
- Neon test lamp at front of probe
- Resistors reduce voltage reaching leads
- 24-in. lead – rated 1,000V
- 1-year warranty



**61-040**

**Test-Glo™ Circuit Tester**

## Twin Lead Tester

### Features

- Check voltage from 80V to 500V AC/DC
- Heavy-duty test probes
- 1-year warranty



**61-503**

**Twin Lead Tester**



## 3-Phase/Motor Rotation Testers

### Features



- Identifies three-phase sequence
  - Indicates motor rotation
  - Checks for open phases
  - For use up to 600V
  - 2-year warranty
- Includes carrying case

### Features

- For use up to 600V
  - Color-coded insulators over alligator clips
  - Shock resistant housing
  - Easy to read
  - 2-year warranty
- Includes carrying case



**61-521**  
3-Phase/Motor  
Rotation Tester



**61-520**  
3-Phase/Motor  
Rotation Tester



## Light Meter

### Features

- Wide lighting range
  - Foot candle and lux measurement
  - Remote light sensor
  - Cosine and color corrected
  - Peak hold
  - Low battery indication
  - 2-year warranty
- Includes carrying case



**61-681**  
Digital Light Meter



Specifications	61-681	
	RANGE & RESOLUTION	ACCURACY
FOOT CANDLES	20.00/200.00/2000.0/200000	2%
LUX	20.00/200.00/2000.0/200000	2%

## Infrared Thermometer

### Features

- 15:1 angle of viewability
  - Built-in laser pointer
  - Backlit display
  - Auto power off
  - Measures temperatures from 0° F to 500° F (-18° C to 260° C)
  - 2-year warranty
- Includes carrying case



**61-682**  
Infrared Thermometer



Specifications	61-682	
	RANGE & RESOLUTION	ACCURACY
	0° F to 500° F (-18° C to 260° C)	3.0%

## Current Clamp Adapters

### Features

- Provide safe, easy measurement of AC current
- Extend the current measurement capabilities of digital multimeters
- AC milli-volt output (1mVAC = 1mA)



**61-332**  
200AAC



**61-451**  
300AAC



**61-333**  
500AAC



**61-334**  
600A AC/DC  
2' lead length



**61-436**  
1000AAC  
2' lead length

## Flexible Clamp Adapters

### Features

- Provide safe, easy measurement of high AC currents
- Large opening and flexible materials to wrap around conductors and bus bars
- Shape Memory allows pre-forming before installation
- Extend the current measurement capabilities of digital multimeters



**61-330**  
1000AAC



**61-331**  
300/3000AAC

Specifications	61-330	61-331	61-332	61-333	61-334	61-436	61-451
AC CURRENT	1000 A	300/3000 A	200 A	500 A	600 A	1000 A	300 A
DC CURRENT	—	—	—	—	600 A	—	—
OUTPUT SIGNAL	1mV/A	1mV/A/10mV/A	1mV/A	1mV/A	1mV/A	1mV/A	1mV/A
MAX CONDUCTOR SIZE	8" (19cm)	8" (19cm)	0.78" (19.8mm)	1.18" (30mm)	1.125" (28.5mm)	2.25" (57.1mm)	0.91" (23mm)
SENSOR LENGTH	24" (61cm)	36" (91cm)	—	—	—	—	—

CE N12966

## Line Splitter



**61-561**  
Line splitter with direct  
and 10x sensitivity

## Carrying Cases



**61-010**

Leather case for use with voltage testers

**61-020**  
Premium leather case for use with voltage testers



**C-290**

Nylon carrying case for use with DMM's



**C-90**

Nylon carrying case for use with all Vol-Con® and Vol-Test® Testers



**61-445**

Small nylon carrying case with four convenient pockets



**61-447**

Large nylon carrying case with six large inside pockets and one zippered outside pocket



## Carrying Case Selection Guide

MULTIMETER CARRYING CASE SELECTION GUIDE	320 Series			350			360		490		600 Series			610		630	
	61-320	61-322	61-324	61-350	61-352	61-354	61-360	61-361	61-494	61-495	61-602	61-603	61-609	61-610	61-614	61-633	61-635
C-290 Nylon Carrying Case	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•

TESTER CARRYING CASE SELECTION GUIDE	Voltage Testers									
	61-058	61-065	61-076	61-085	61-086	61-090	61-092	61-681	61-682	61-164
61-010 Leather Tester Case		•	•							
61-020 Premium Leather Tester Case		•	•							
61-179 Nylon Carrying Case										•
C-50 Nylon Carrying Case	•									
C-90 Nylon Carrying Case		•	•	•	•	•	•	•	•	
C-954 Hard Carrying Case										•
C-958 Hard Carrying Case										•

CLAMP METER CARRYING CASE SELECTION GUIDE	61-452	700 Series			730		760 Series			770	
		61-701	61-702	61-704	61-732	61-736	61-764	61-766	61-768	61-772	61-774
61-179 Nylon Carrying Case					•	•					
C-452 Nylon Carrying Case	•										
C-700 Nylon Carrying Case		•	•	•							
C-730 Nylon Carrying Case					•	•					
C-760 Carrying Case							•	•	•		
C-770 Nylon Carrying Case										•	•



## Test Lead Kits



### TL-435

#### Industrial Test Lead Kit

Kit contains: 1.5m silicone lead set, probes w/SS tips, rigid alligator clips, flex pincer clips, insulated alligator clips, insulated spade lugs and padded zipper pouch, 1000V, 10A rating



### TL-436

#### Electrical Test Lead Kit

Kit contains: 1.5m silicone lead set, probes w/SS tips, insulated alligator clips and tri-fold pouch, 1000V, 10A rating

## Test Leads



### TL-104

Test Leads  
w/Alligator  
Clip



### TL-58

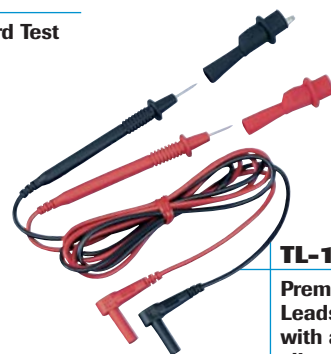
Standard Test  
Leads



### TLF-252

Fused test leads  
with alligator clips,  
10A/600V,  
CAT III - 1000V

### TL-102 Silicone Test Leads



### TL-100

Premium Test  
Leads  
with alligator  
clips

## Thermocouples

### Features

- Measures up to 1500° F (816° C)
- K-type thermocouples plug into digital multimeter or clamp meter voltage ports with 61-465 adapter



### 61-465

Thermocouple Adapter



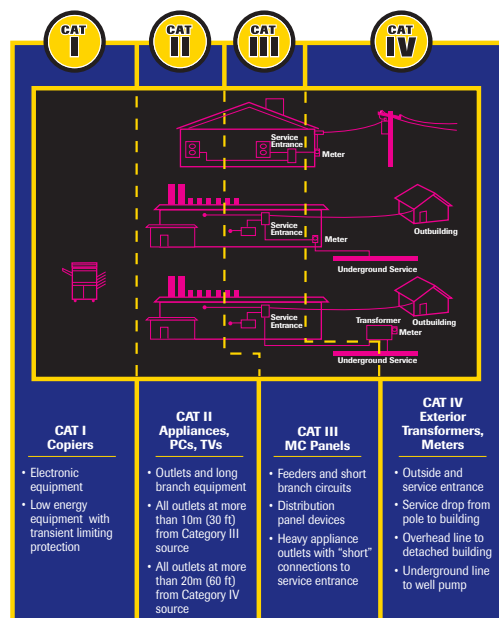
### 61-461

Beaded K-type  
Thermocouple

## Replacement Parts Selection Guide

METER REPLACEMENT PARTS SELECTION GUIDE			310 Series	320 Series	350 Series	360	450	490	600	610	700 Series	710	730	760 Series	770																					
			61-310	61-312	61-314	61-320	61-322	61-324	61-350	61-352	61-354	61-360	61-361	61-452	61-494	61-495	61-605	61-610	61-614	61-701	61-702	61-704	61-710	61-732	61-736	61-764	61-766	61-768	61-772	61-774						
FUSES																																				
F-1	0.5A (250V)	0.25 x 1.25 in.																	•				•													
F-102	1A (600V)	.41 x 1.5 in.					•	•								•	•																			
F-103	15A (600V)	.41 x 1.5 in.														•	•																			
F-310	250mA (250V)	5 x 20mm	•																																	
F-312	500mA (250V)	5 x 20mm		•	•																															
F-314	10A (250V)	5 x 20mm		•	•																															
F-350	10A (500V)	6.35 x 32mm								•	•																									
LA-3893	2A (600V)	6.35 x 25.4mm											•																							
LA-3895	0.5A (250V)	5 x 20mm																	•																	
LA-3896	0.5A (500V)	6.35 x 32mm											•																							
LA-3897	10A (600V)	6.35 x 25.4mm											•																							
LA-3898	0.1A (250V)	5 x 20mm											•																							
BATTERIES																																				
61-201	1.5V (LR44)																		•																	
—	1.5V (AA)		•		•	•								•				•	•				•													
—	1.5V (AAA)			•																					•	•	•									
—	9V						•	•					•	•		•	•				•	•	•				•	•	•	•	•					
TEST LEADS																																				
TL-34	Leads w/pin connectors																		•																	
TL-54	Test Leads																																			
TL-58	Standard									•	•	•	•	•									•		•	•	•									
TL-100	Premium leads w/alligator clips					•	•	•								•	•																			
TL-102	Silicone test leads																				•	•	•													
TL-104	Test leads w/alligator clips																										•	•	•	•	•					
RUBBER BOOTS																																				
61-370	360 Series rubber boot												•	•																						
C-92	Pocket-style meters rubber boot																																			
C-320	320 Series rubber boot					•	•	•																												
C-490	490 Series rubber boot															•	•																			
MISCELLANEOUS																																				
61-565	Magnetic Strap					•	•	•	•	•	•					•	•																			

## Safety in the Field



The power demands of today's high-tech world have caused a marked increase in occurrences and levels of transient overvoltages. The International Electrotechnical Commission (IEC) has developed a safety standards model for measurement, control and laboratory use.

**Category I** – The signal level for telecommunications, electronic and other low-energy equipment with transient-limiting protection. Peak impulse transient range is 600–4,000 volts with a 30 ohm source.

**Category II** – The local level for fixed and non-fixed powered devices including appliances, lighting and portable equipment. Outlets located more than 30 feet from CAT III sources and 60 feet from CAT IV sources. Peak impulse transient range is from 600–6,000 volts with a 12 ohm source.

**Category III** – The distribution level for fixed primary feeders or branch circuits. Circuits that are separated from CAT IV sources by at least one level of transformer isolation. Peak impulse transient range is 600–8,000 volts with a 2 ohm source.

**Category IV (proposed)** – The primary supply level for the highest levels of transient overvoltage. Includes the utility service both outside and at the service entrance, service drop from the pole to the building, overhead line to remote buildings, and underground line to a well pump. Peak impulse transient range is 600–12,000 volts with less than a 1 ohm source.